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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,350	06/23/2006	Masahiro Murakawa	KUB-005	3367

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EXAMINER

VO, CECILE H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,350	Applicant(s) MURAKAWA ET AL.	
	Examiner CECILE VO	Art Unit 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,7 and 9 is/are pending in the application.
- 4a) Of the above claim(s) 1-5 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/29/2008 has been entered.

2. Claims 6, 7 and 9 are pending as amended on 12/29/2008, with claim 6 being independent. Claim 6 is currently amended. Claims 1-5 and 8 are cancelled.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6, 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is vague and indefinite because the term "*for each of a predetermined number*" in line 12, is unclear there is one or more than one of "*predetermined number*".

Claim 6 also includes the limitation "*send a predetermined number of individuals from a parent population of the individuals using processing of the genetic algorithm to others of said plurality of processing devices and receives a predetermined number of individuals from other processing devices to the parent population*" is unclear to the Examiner whether "*a predetermined number of individuals from other processing devices*" is intended to be the same as or different from "*a predetermined number of individuals from a parent population*" and what the Applicant intend to claim. The Applicant's amendment points to paragraphs [0035], [0036] and figs. 2 and 6 in the original specification as providing support for the limitation. However, it is noted that only the claims form the metes and bounds of the invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.1993).

Claims 7 and 9 are rejected for the same reason as of claim 6, due to their dependence on the above rejected claims.

Claim 9 recites "the local search process" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6, 7 and 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 6, 7 and 9 recite the use of various devices that would be reasonably understood by one of ordinary skill in the art to mean software, a software based component implementation, or an abstract concept based on software. Examples of devices used in the claim are: a parameter adjusting device, processing devices, migration devices, and other such terms that are interpreted to mean abstract concepts and software implementations. The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best functional descriptive material *per se*.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 6, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatakeyama, US Patent Number 6,542,468 B1.

Regarding claim 6, Hatakeyama discloses a parameter adjusting device comprising:

a plurality of processing devices forming parameter regulation devices configured to optimize parameters using a genetic algorithm (e.g. the system (i.e. figs 1A and 1B) comprises estimation individuals to be used for estimating a response time for each of clients, and makes each of the plurality of estimation individuals evolve into an estimation individual which can make a more preferable estimate by using a genetic algorithm, see abstract, lines 10-15);

a part of said plurality of processing devices being assigned to search using a local search method (e.g. The PROXY server group 120 is composed of servers 121, 122, etc., each of which is connected to the network 140. A PROXY server has a "firewall" capability for protecting the information assets in an internal network such as an enterprise network from an external network such as the Internet, etc., to which anyone can make an access; and a "proxy server" capability for accepting a service request issued from a client in the internal network to the external network, and for processing the request instead. By using the PROXY server, the client in the internal network can access the external network and can request services provided by the

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servers in various external networks, etc. via the PROXY server without being conscious of the existence of a firewall, col. 7, lines 58-67 through col. 8, lines 1-3);

a rest of said plurality of processing devices being assigned to processing of the genetic algorithm (e.g. Fig. 2 preferred embodiment adopts a genetic algorithm (GA) in order to estimate an optimum path, col. 9, lines 31-54), said plurality of processing devices being respectively configured to individually (e.g. the path calculating request an optimum estimation individual and an actual response time of the estimation information managing unit. The path calculating unit can adjust the timing at which it request the estimation individual of the estimation individual according to the estimation individual in consideration of a communication load, col. 10, lines 51-58) and simultaneously execute the genetic algorithm (e.g. In the genetic algorithm, an estimation individual with a higher degree of fitness survives with a higher probability, so that an estimation individual group of next generation will be formed by centering the estimation individual with the higher degree of fitness, col. 11, lines 5-23) and having migration devices which (e.g. Fig. 9 and col. 18, lines 33-67 through col. 19, lines 1-24), for each of a predetermined number of generation change processing of the genetic algorithm, send a predetermined number of individuals from a parent population of the individuals using processing of the genetic algorithm to others of said plurality of processing devices and receives a predetermined number of individuals from other processing devices to the parent population (e.g. the path information managing unit stores the information and provides these items of information according to the request made by the path calculating unit. The path that we consider here is the path

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fundamentally obtained by linking the path (going path) on which the client group 130 transmits a request to the service providing server group 110 and the path (returning path) on which the service providing server group 110 transmits a response to the client group 130. Normally, the start and end addresses of the path are identical, col. 9, lines 5-15); and

search processing control means configured for collecting interim results of searches from the processing devices assigned to the processing by the genetic algorithm and using search processing by the local search method (e.g. the path selecting method, col. 22, lines 40-67).

Regarding claim 7, Hatakeyama further discloses the each processing device comprises a CPU of a computer or server including a plurality of CPUs in which said genetic algorithm is installed (Fig. 1A – 1B).

Claim 8 is cancelled.

Regarding claim 9, Hatakeyama further discloses a selected one of the plurality of processing devices is configured to determine if all of the searches conducted by the plurality of processing devices have been completed and to terminate the local search process in response to completion of all local searches (col. 18, lines 33-41).

Response to Arguments

8. Applicant's arguments filed 12/29/2008 have been fully considered but they are not persuasive.

Applicant is silent on the ground the Examiner set forth for the rejection of claim 9 under 35 U.S.C. 112, second paragraph, in the Final rejection of 08/29/2008.

Therefore, Examiner hereby respectfully maintaining the rejection of claim 9 (see the rejection above).

In response to Applicant's arguments: the cited reference does not have "*a plurality of processing devices to individually and simultaneously execute the genetic algorithm and having migration devices which*" and "*search processing control*". The Examiner respectfully disagrees.

Base on the amended claim 6, Examiner has cited particular columns and line numbers in the reference applied to claim 6 above for the convenience of the Applicant: for each of plurality of processing devices being respectively configured to individually (e.g. the path calculating request an optimum estimation individual and an actual response time of the estimation information managing unit. The path calculating unit can adjust the timing at which it request the estimation individual of the estimation individual according to the estimation individual in consideration of a communication load, col. 10, lines 51-58) and simultaneously execute the genetic algorithm (e.g. In the

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genetic algorithm, an estimation individual with a higher degree of fitness survives with a higher probability, so that an estimation individual group of next generation will be formed by centering the estimation individual with the higher degree of fitness, col. 11, lines 5-23) and having migration devices which (e.g. Fig. 9 and col. 18, lines 33-67 through col. 19, lines 1-24), for each of a predetermined number of generation change processing of the genetic algorithm, send a predetermined number of individuals from a parent population of the individuals using processing of the genetic algorithm to others of said plurality of processing devices and receives a predetermined number of individuals from other processing devices to the parent population (e.g. the path information managing unit stores the information and provides these items of information according to the request made by the path calculating unit. The path that we consider here is the path fundamentally obtained by linking the path (going path) on which the client group 130 transmits a request to the service providing server group 110 and the path (returning path) on which the service providing server group 110 transmits a response to the client group 130. Normally, the start and end addresses of the path are identical, col. 9, lines 5-15); and

search processing control means configured for collecting interim results of searches from the processing devices assigned to the processing by the genetic algorithm and using search processing by the local search method (e.g. the path selecting method, col. 22, lines 40-67).

The Examiner respectfully submits that the amended claim 6 is unclear and is addressed in the rejection under 112 second paragraphs above. Therefore, the Examiner has full latitude to interpret each claim in the broadest reasonable sense (in re Morris, 127 F.3d 1048, 105455, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997)). Examiner references prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning. Finally, this application is now considered. However, the teaching of Hatakeyama is still anticipated amended claim 6. Therefore, the rejection of the claim under 35 U.S.C. 102(b) is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CECILE VO whose telephone number is (571)270-3031. The examiner can normally be reached on Mon - Thu (9AM - 5:00PM EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on 571-272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 9, 2009
/Cam Y Truong/
Primary Examiner, Art Unit 2169

/Cecile Vo/
Examiner
Art Unit 2169